

An investigation into the factors that influence the buying process of online role-playing gamers

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Abstract: Massively multiplayer online role-playing games (MMORPGs) are the dominant form of online games. This study attempts to uncover what factors influence gamers when purchasing a MMORPG and renewing its monthly subscription. The results of this study confirm that MMORPGs are still male-dominated and gamers are likely to be single and have higher levels of education. A MMORPG should cost around €40 and a reasonable monthly subscription fee should be around €13. Gameplay videos and word of mouth are primary sources of information. Gamers want MMORPGs that have good stories, gameplay and graphics and will only renew subscriptions if they have a wide variety of things to do.

Keywords: Marketing, consumer buying behaviour, MMORPGs, online games, massively-multiplayer online role-playing games, gamers

MMORPGs involve a virtual world in which players create an avatar and use it to achieve the goals set by the game's creators.¹ Such a virtual world is usually huge and somewhat realistic, albeit generally fictional, in that it would contain different continents, each with their own topography and climate² as well as their own history, heroes, villains, and monsters.³

These virtual worlds must be continuously online since players may not necessarily be playing at the same time, although at any given time

1 W.S. Bainbridge, *Online Multiplayer Games* (North Carolina, 2010).

2 R.V. Kelly, *Massively Multiplayer Online Role-Playing Games* (North Carolina, 2004).

3 A.R. Rice, *MMO Evolution* (North Carolina, 2006).

there may be several hundred players playing simultaneously with the ability to interact with each other. This is analogous to a person sleeping in the real world while other people go about on their business.

MMORPGs are complex games and require much more involvement than normal video games. This is because the player's avatar will take a long time to develop and become powerful. On average gamers play 20 to 30 hours a week and can keep playing the same game for years.⁴

MMORPGs are different from normal video games as television is different from radio because, unlike normal games, they provide a virtual environment where people may socialize, explore, create things, quest alone or in groups, fight monsters or even other players amongst other possible things.⁵

This study seeks to uncover factors influencing the buying behaviour of online gamers when purchasing a MMORPG and renewing its subscription. The following research questions were answered:

- a) Which sources of information do gamers prefer/trust to inform themselves?
- b) What factors have the greatest impact on gamers' purchase decisions?
- c) Which of these factors make gamers renew their subscriptions or buy additional in-game items?
- d) Are hard-core and casual gamers influenced by the same factors?

The Consumer Behaviour Model

Solomon defines consumer behaviour as 'The study of the processes involved when individuals or groups select, purchase, use or dispose of products, services, ideas, or experiences to satisfy needs and desires'.⁶

Organizations must learn as much as possible about consumers if they are to succeed in today's marketplace. The challenge lies in understanding the constantly changing attributes that make up the modern consumer.⁷ This makes researching consumers relatively

4 Kelly.

5 Bainbridge; Kelly, 13.

6 M.R. Solomon, *Consumer Behaviour: Buying, Having and Being*, 7th edition (New Jersey, 2006), 7.

7 R. Wright, *Consumer Behaviour* (London, 2006).

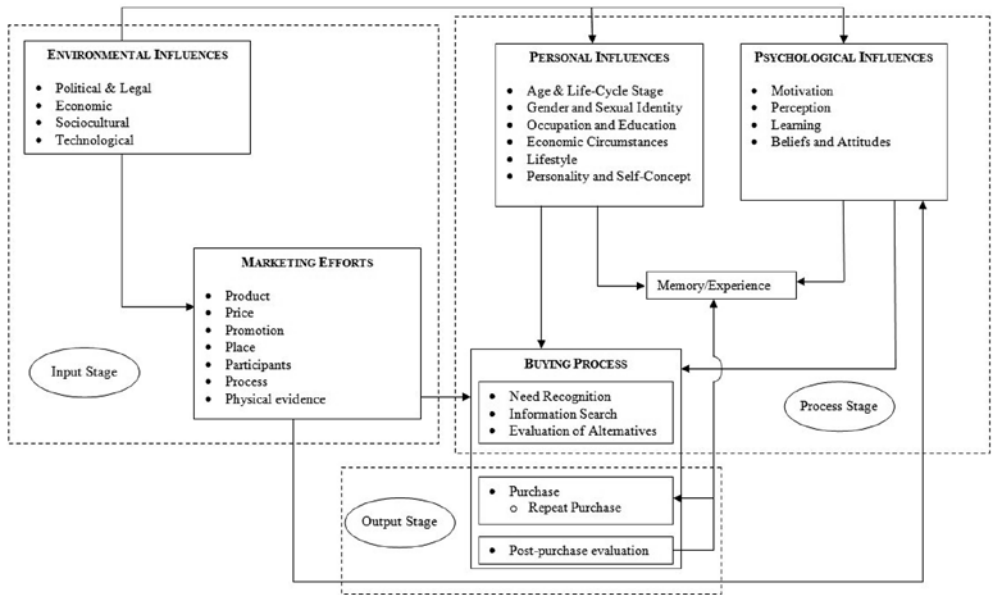


Fig. 1 – Model of consumer behaviour

Adapted from Schiffman et al.; Blackwell et al., 2006; Solomon; Kotler.

difficult, necessitating constant research. For example, a significant change is that consumer affluence has been increasing across the European Union because of rising minimum wages which may make people change their buying patterns.⁸ Another noteworthy change is the Internet and the manner in which it empowered consumers because it has made it easier and much less expensive to look for information and evaluate product alternatives.⁹ The Internet has also changed the way people play, buy things, and communicate amongst other things.¹⁰

8 Eurostat, *Europe in figures – Eurostat yearbook 2009* (Luxembourg, 2009).

9 R.A. Peterson & M.C. Merino 'Consumer Information Search Behaviour and the Internet', *Psychology and Marketing*, Vol. 22, No. 2 (2003), 99–121; A. Lund Jespen, 'Factors Affecting Consumer Use of the Internet for Information Search', *Journal of Interactive Marketing*, Vol. 21 No. 3 (2207), 21–34.

10 M. Dertrouzos, *What will be: How the new world of information will change our lives* (San Francisco, 1997), quoted in M. Kim & S. Lennon, 'The effects of visual and verbal information on attitudes and purchase intentions in internet shopping', *Psychology and Marketing*, Vol. 25 No. 2 (2008), 146–78.

Extant literature agrees that studying the consumer is made easier if their behaviour is split up into three separate but interrelated stages¹¹ as shown in figure 1.

The Input (Pre-Purchase) Stage

This stage occurs before a consumer decides to buy something. Consumer behaviour is not detached from the environment in which it is happening and thus macro-environmental factors also influence consumers, albeit broadly.¹² Moreover companies try to influence and persuade consumers through their marketing efforts in order to reach their objectives.¹³

These environmental influences, such as consumers' income, reference groups, and improvements in computing power, as well as marketing efforts, such as promotional efforts, a well-developed product, and pricing, are affecting, both consciously and subconsciously, consumers' attitudes, behaviour, and values.¹⁴

The Process (Purchase) Stage

This is the stage during which consumers seek and process information regarding their potential purchases. Information seeking and processing are influenced by a person's personal characteristics, such as gender, age, and lifestyle, as well as psychological characteristics, such as motivation and perception. These characteristics will affect the evaluation of alternative products in a consumer's evoked set.¹⁵ This

11 L.G. Schiffman, L.L. Kanuk, & H. Hansen, *Consumer Behaviour – A European Outlook*, 9th edition (New Jersey, 2008); R.D. Blackwell, P.W. Miniard, & J.F. Engel (2006), *Consumer Behaviour* (USA, 2006); Solomon; F. Brassington & S. Pettitt, *Principles of Marketing*, 3rd edition (Englewood Cliffs, NJ, 2003); P. Kotler, *Marketing Management: Analysis, Planning, Implementation and Control*, 9th edition (New Jersey, 1996); J.A. Howard & J.N. Sheth, *The Theory of Buyer Behaviour* (New York, 1969).

12 Brassington and Pettitt.

13 Schiffman *et al.*; Kotler.

14 Schiffman *et al.*; Solomon; Brassington and Pettitt; Kotler; Blackwell *et al.*; Howard & Sheth.

15 Schiffman *et al.*; Solomon; Brassington and Pettitt; Kotler; Blackwell *et al.*; Howard & Sheth.

stage contains the first three stages (need recognition, information search, and evaluation of alternatives) of the widely accepted five-stage model of the consumer decision-making process, based on the Engel-Kollat-Blackwell model, and referred to in most literature.¹⁶

There are barely any studies related to how gamers gain their information and how they choose amongst the available alternatives. Rice does mention several factors, such as expanding the game-world over time, a good story, and content which gamers may use to evaluate a MMORPG. Rice's study is based on his observations and thoughts of his experience in the industry rather than research.¹⁷

The Output (Post-Purchase) Stage

This stage consists of the customer's purchase decision and his overall satisfaction with a purchase.¹⁸ This stage is important in the MMORPG industry because developers must know what makes gamers decide to buy one game over another. Furthermore, if expectations are met, gamers will probably renew their subscriptions. Gamers may also stop playing a game for other reasons such as the game becoming too time-consuming.

Conclusion

This section presented an overall view of the consumer-buying model. Various aspects of consumer-buying were explored during this study enabling the author to identify many possible factors that may influence gamers when buying an online role-playing game ranging from broad cultural factors to personal beliefs.

16 W.K. Darley, C. Blankson, & D.J. Luethge, 'Toward and Integrated Framework for Online Consumer Behaviour and Decision Making Process: A Review', *Psychology & Marketing*, Vol. 27, No. 2 (2010), 94–116.

17 Rice.

18 Schiffman *et al.*

Methodology

A descriptive approach was taken for this study. Literature was read to identify key factors that influence the buying behaviour of consumers. This was further expanded on, by seeking literature which identifies factors that influence gamers when buying MMORPGs.

Existing literature on the MMORPG industry focuses mainly on issues such the motives which people have to play,¹⁹ demographics and psychographics,²⁰ gender issues,²¹ and addiction.²² While these studies were very useful in giving the author insights and background information²³ into the MMORPG industry as well as identifying important demographics and factors that may trigger the buying process initially, they offer little in understanding factors that influence gamers when purchasing a game. Primary research was deemed necessary to reach the aims of this study.

The author spent time in several MMORPGs to become more familiar with them. A non-participant approach was taken as a precaution

- 19 K. Fang, Y. Lin, & T. Chuang, 'Why do internet users play massively online role-playing games? A mixed method', *Management Decision*, Vol. 47 No. 8 (2009) 1245–60; N. Yee, 'Motivations of Play in Online Games', *CyberPsychology & Behavior*, Vol. 9 No. 6 (2006), 772–5; Id., 'Facets: 5 Motivation Factors for Why People Play MMORPG's' (2002) [Online], Available from: <http://www.nickyee.com/facets/home.html>. Accessed 4 June 2011.
- 20 N. Yee, 'The demographics, motivations and derived experiences of users of massively multiuser online graphical environments', *PRESENCE: Teleoperators and Virtual Environments*, Vol. 15 No. 3 (2006), 309–29; M.D. Griffiths, M.N.O. Davies, & D. Chappell, 'Demographic Factors and Playing Variables in Online Computer Gaming', *CyberPsychology & Behavior*, Vol. 7 No. 4 (2004), 479–87; S. Youn, M. Lee, and K.O. Doyle, 'Lifestyles of Online Gamers: A Psychographic Approach', *Journal of Interactive Advertising*, Vol. 3 No. 2 (2003), 49–56.
- 21 E. MacCallum-Stewart, 'The street smarts of a cartoon princess. New roles for women in games', *Digital Creativity*, Vol. 20, No. 4 (2009), 225–37; D. Williams, M. Consalvo, S. Caplan, & N. Yee, 'Looking for Gender: Gender Roles and Behaviour among Online Gamers', *Journal of Communication*, Vol. 59 (2009), No. 4, 700–25; Z. Hussain & M.D. Griffiths, 'Gender Swapping and Socialising in Cyberspace: An Exploratory Study', *CyberPsychology and Behavior*, Vol. 11 No. 1 (2008), 47–53; N. Yee, 'Maps of Digital Desires: Exploring the Topography of Gender and Play in Online Games', in Y. Kafai, C. Heeter, J. Denner, & J. Sun (eds.), *Beyond Barbie and Mortal Kombat: New Perspectives on Gender and Gaming* (Cambridge, MA, 2008), 83–96.
- 22 C. Wan & W. Chiou, 'The Motivations Of Adolescents Who Are Addicted To Online Games: A Cognitive Perspective', *Adolescence*, Vol. 42 No. 165 (2007), 179–97; B.D. Ng and P. Wiemer-Hastings, 'Addiction to the Internet and Online Gaming', *CyberPsychology and Behavior*, Vol. 8 No. 2 (2005), 110–13.
- 23 A.C. Burns & R.F. Bush, *Marketing Research*, 2nd edition (New Jersey, 1988).

against gamers behaving differently because they are being observed. Furthermore, subscribing to several MMORPGs gave the author access to their forums. These were a useful source of information in their own right, since gamers discuss a lot of MMORPG-related issues in them. The forums were also used to post the questionnaire's web-link as one of the distribution methods.

A questionnaire was prepared, using the output from literature review and pre-tested. Most of the questions were close-ended to make it easier and less time-consuming for the respondents to fill the questionnaire.²⁴ A mixture of scales was used, depending on the type of information that was required on the respondent. A five-point scale was chosen because the author, following the information gathered in the literature review and the in-depth interviews, felt that respondents may genuinely have neutral answers for these questions.²⁵ Some open-ended questions were also included to get respondents' views on certain aspects. The questionnaire was web-based and snowballing was asked of the respondents. A web-based questionnaire was considered to be an ideal choice because this type of survey is considered to be fast and economical and easy for the respondents to fill in and return.²⁶ While this method has its own share of disadvantages, usually related to sampling issues, it was chosen because MMORPG gamers must have access to the internet to play and thus representation is not a problem in this case.²⁷

A non-probability sample had to be used for this study because the sheer number of MMORPG gamers whose information is stored on the private databases of the organizations that host MMORPGs, made it impossible for the author to obtain a sample frame. Purposive sampling was chosen because it is more refined than convenience sampling in that the sample would be more representative and very accessible²⁸ since the sample would not be based purely on chance.²⁹ In this method, respondents are selected because of their understanding of a particular

24 Ibid.

25 Ibid.

26 A. Bryman & E. Bell, *Business Research Methods* (Oxford, 2003).

27 Ibid.

28 A. Parasuraman, D. Grewal, & R. Edwardhnan, *Marketing Research*, 2nd edition (Boston, 2007), 345.

29 A. Bryman, *Social Research Methods*, 3rd edition (Oxford, 2008).

phenomenon.³⁰ The questionnaire was distributed on MMORPG-related Facebook pages, Twitter feeds, and Raptr as well as forums of popular MMORPGs to generate an acceptable response rate.

Analysis

A descriptive analysis of the returned questionnaires was carried out. The sample (N=301) was composed of 234 males and 67 females. The small percentage of females is similar to other foreign studies such as those by Yee³¹ and Griffiths *et al.* Of the respondents, 43.5% were aged between 18 and 24 years and about 33.9% were aged between 25 and 34 years. 35.2% of the sample have post-secondary education, while 47.6% have tertiary and post-graduate degrees.

Most players in the sample play around 30 hours a week (M=3.06, SD=1.41, N=301) and have been playing for approximately 5 to 6 years (M=3.83, SD=1.14, N=301). The demographic structure of the sample is similar to other foreign studies. Table 1 shows a summary of the respondents' characteristics. A k-means cluster analysis was run to segregate respondents into two groups based on their playing propensities. This resulted in 196 casual gamers and 105 hardcore gamers.

There is no relationship between gender, age, and level of education and being a hard-core gamer. The study shows that hardcore gamers are more likely to be students and single. Gamers tend to have no children and hardcore gamers are even less likely to have children (M=10.36, df=1, $r=0.001$). Usually, the respondents who work normal hours can only play casually.

Of the respondents 56.1% prefer to play on a Player versus Environment (PvE) server, while 25.9% prefer Player versus Player (PvP) servers. There is no relationship between hardcore and casual gamers and the type of server they play on. PvP players tend to spend more time playing MMORPGs per week than PvE players ($F_{3,297}=6.51$, $p<0.01$). 85.1% of the female respondents avoid PvP servers of any type.

³⁰ Ibid.

³¹ Yee, 'The demographics'.

Table 1 – Respondent characteristics

		18–24 years	25–34 years	35–44 years	45 years or older	Total
Gender	Male	109	75	41	9	234
	Female	22	27	13	5	67
Level of Education	Primary	10	6	3	0	19
	Secondary	15	12	3	3	33
	Post-Secondary	51	36	16	3	106
	Tertiary	40	32	22	4	98
	Postgraduate/ Doctoral	15	16	10	4	45
Number of years playing MMORPGs	Less than 1 year	3	1	2	0	6
	1 – 2 years	11	3	4	1	19
	3 – 5 years	51	32	14	1	98
	6 – 8 years	50	37	15	7	109
	9 – 11 years	12	16	7	1	36
	More than 11 years	4	13	12	4	33
Hours spent playing MMORPGs per week	Up to 10 hours	8	15	14	0	37
	11 – 20 hours	34	28	17	4	83
	21 – 30 hours	35	26	11	4	76
	31 – 40 hours	26	19	8	6	59
	41 – 50 hours	14	6	2	0	22
	More than 50 hrs	14	8	2	0	24

Preferred Sources of Information

Table 2 shows the respondents choices regarding their favourite sources of information, in rank order.

Table 2 – Preferred sources of information (rank order scales)

	Mean ^a	N	SD
Videos	2.70	297	1.86
Friends	3.51	297	2.27
Reviews	3.99	297	2.10
Trial Periods	4.18	297	2.46
Forums	4.77	297	2.30
Screenshots	4.95	297	1.85
Magazines	6.68	297	2.20
Newsletters	7.06	297	1.57
Adverts	7.15	297	2.01

a. lower means indicate higher preference

Gameplay videos are the preferred source of information by both casual and hard-core gamers. 39.9% of the respondents were introduced to MMORPGs by friends and 79.4% typically join servers in which real life friends are playing ($M=4.19$, $SD=0.9$, $N=301$).

Attitudes towards Free-to-Play MMORPGs

Out of the sample, 25.6% do not play Free-to-Play (F2P) MMORPGs and mostly do not play them because they consider them as ‘pay to win’ games. This is because typically players can buy extra equipment in such games. Most gamers dislike this practice with 61.1% strongly disagreeing to it ($M=1.73$, $SD=1.08$, $N=301$). Paying for extra content in F2P games is also disliked by the respondents ($M=2.04$, $SD=0.74$, $N=301$). Paying extra to customize avatars is acceptable ($M=3.42$, $SD=1.26$, $N=301$) and perhaps this is one of the potential sources of income the developers/publishers of F2P games should consider.

The respondents agree that Pay-to-Play (P2P) MMORPGs are generally better than F2P ones ($M=3.6$, $SD=1.2$, $N=301$). However, 46.2 % of the respondents would still play F2P games if they are good enough and 20.3% play them as a change from the game they typically play. There is no relationship between income and whether a gamer plays F2P or P2P MMORPGs.

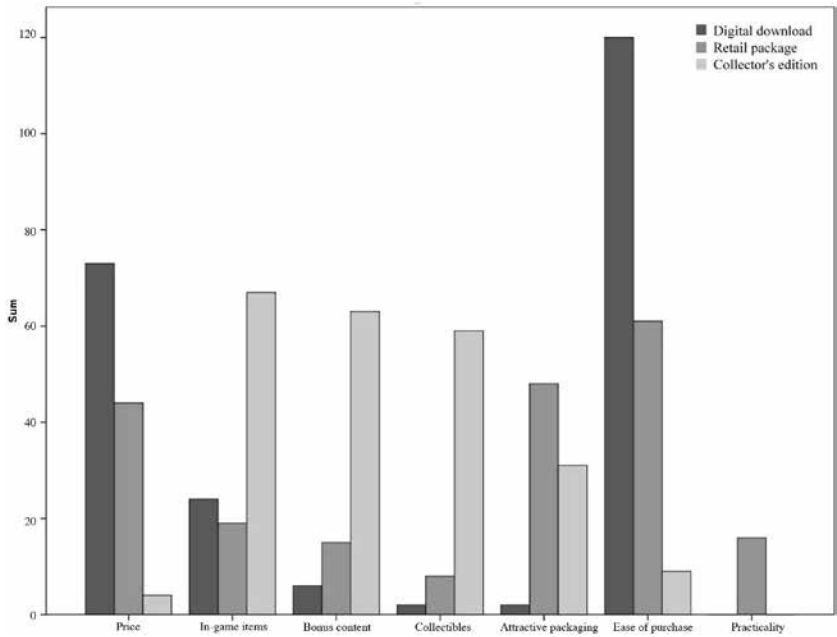


Figure 2 – Package preferences

Product Version

Figure 2 shows the respondents' preferences regarding the product version they usually buy.

Among the respondents, 41.5% prefer to buy the game client as a digital download and primarily do so because it is easier for them to purchase and usually cheaper. The 32.6% of the respondents who buy a normal retail version of the game client do so because they would rather have a physical copy since it is more practical in a number of ways, such as making it easier to install the game on different computers and to reinstall the game should the need arise.

Attitudes towards Price

Price is not a major influence when purchasing a MMORPG except that it has to be reasonable. The respondents do not believe that higher-

priced MMORPGs are necessarily better than lower priced ones ($M=2.65$, $SD=0.89$, $N=301$). Of the respondents 67.4% believe that the subscription fee influences their decision to buy a MMORPG more than the price of the game client ($M=3.8$, $SD=1.18$, $N=301$).

Among the respondents 53.2% think that a reasonable price for the basic game client is between €21 and €40 ($M=2.04$, $SD=0.68$, $N=301$). Hardcore gamers are prepared to pay slightly more and this difference is statistically significant ($F_{1,299}=4.15$, $p=0.04$). Females are more likely to subscribe for multiple months a time ($F_{1,299}=5.67$, $p<0.02$), to save on costs and get better value for money.

There is no difference between hardcore ($M=1.57$, $SD=0.73$, $N=105$) and casual gamers ($M=1.58$, $SD=0.65$, $N=196$) in the amount of money paid on subscriptions per month ($F_{1,299}=0.015$, $p=0.90$). Of the respondents 51.5% pay between €0 and €10 in subscription fees and another 40.5% pay between €11 and €20.

In the sample 78.7% believe that a reasonable monthly subscription fee is between €0 and €10 ($M=1.22$, $SD=0.43$, $N=301$). This belief is independent of income and whether a gamer is hardcore or casual.

The price the respondents are willing to pay to buy the game client is not related to their income; however, there is a small and positive linear relationship between the subscriptions paid and income of gamers ($r=0.25$, $N=301$, $p<0.01$). This may indicate that income, while not influencing whether people play or not, might influence whether to play F2P or P2P MMORPGs.

Factors Influencing Purchase Choice of a MMORPG

Table 3 shows a list of factors, in order of importance, which influence gamers when buying a game.

There are few differences between hardcore and casual gamers regarding factors influencing the purchase of a MMORPG. Gameplay, avatar graphics, environmental graphics, and story/lore are the most important factors in both cases as shown in Table 4. The most significant differences between hardcore and casual gamers when buying a MMORPG are shown in Table 5. These differences are minor and in reality still important factors to both types of players.

Table 3 – Factors influencing purchase decision of a MMORPG

	N	Mean ^a	SD
Gameplay	301	4.87	0.37
Graphics (Avatar)	301	4.51	0.69
Graphics (Environment)	301	4.51	0.69
Story/lore	301	4.42	0.78
Ability to play solo	301	4.19	0.89
Detailed avatar customization	301	4.17	0.91
Originality	301	4.16	0.85
Ability to play in small groups (1-5)	301	4.13	0.81
Theme	301	4.06	0.85
Genre	301	4.02	0.92
Grouping mechanics	301	4.02	0.92
Population	301	3.92	1.00
Sound effects	301	3.89	0.93
Price	301	3.83	0.97
Cosmetic equipment	301	3.75	1.05
In-game music	301	3.74	1.09
Crafting	301	3.71	1.06
Ability to play in big groups (6-10)	301	3.66	1.15
Pre-launch hype	301	3.58	1.02
Developer with proven history	301	3.43	1.12
Ability to use communication software	301	3.42	1.21
Trial	301	3.39	1.13
Age rating	301	2.58	1.28
Adverts	301	2.21	1.09

a. min = 1; max = 5

When it comes to buying a new MMORPG, there are some interesting differences between males and females. The significant differences between males and females are shown in Table 6. Females attach more importance to cosmetic equipment, the story, and price than

males. Males, on the other hand, attach more importance than females to music, grouping mechanics, and sound effects.

Table 4 –Top factors influencing casual and hardcore gamers when buying a game

	Casual			Hardcore		
	N	Mean ^a	SD	N	Mean ^a	SD
Gameplay videos	196	4.86	0.39	105	4.90	0.33
Graphics (Avatar)	196	4.51	0.69	105	4.52	0.70
Graphics (Environment)	196	4.48	0.68	105	4.55	0.69
Story/lore	196	4.42	0.76	105	4.41	0.82
Ability to play solo	196	4.15	0.91	105	4.26	0.86

a. min = 1; max = 5

Table 5 – Significant differences influencing purchase decision between casual and hardcore gamers

	Casual			Hardcore			F _{1,299}	Sig.
	N	Mean ^a	SD	N	Mean ^a	SD		
Ability to use communication software	196	3.30	1.19	105	3.63	1.24	5.06	0.025
Ability to play in small groups (1–5)	196	4.05	0.84	105	4.28	0.74	5.33	0.022
Ability to play in big groups (6–10)	196	3.54	1.12	105	3.90	1.17	7.26	0.007
Crafting	196	3.62	1.02	105	3.89	1.11	4.26	0.040
Detailed avatar customization	196	4.06	0.94	105	4.37	0.80	8.20	0.004

a. min = 1; max = 5

Table 6 – Significant differences influencing purchase decision between male and female gamers

	Male			Female			F _{1,299}	Sig.
	N	Mean ^a	SD	N	Mean ^a	SD		
In-game music	234	3.80	1.03	67	3.51	1.28	3.86	0.050
Sound effects	234	3.97	0.88	67	3.63	1.06	7.21	0.008
Story/lore	234	4.37	0.78	67	4.60	0.74	4.60	0.033
Grouping mechanics	234	4.09	0.89	67	3.76	0.97	6.95	0.009
Detailed avatar customisation	234	4.11	0.93	67	4.37	0.78	4.40	0.037
Cosmetic Equipment	234	3.69	1.06	67	3.99	0.99	4.23	0.041

a. min = 1; max = 5

Factors Influencing the Renewal of MMORPG Subscriptions

Table 7 shows a list of factors, in order of importance, which influence gamers when renewing their subscription. There are very few differences between male and female respondents with the only significant differences, shown in Table 8, being that males enjoy competition and being ranked more than females. Males also attach more importance to the game population than females.

Factors Stopping Gamers from Playing MMORPGs

Table 9 shows the main reasons that stop people playing MMORPGs. The major factors that will stop the gamers, whether hardcore or casual, in the sample from playing are boredom, lack of new content, and bugs. Increasing charges, game performance, and lack of challenge are also important factors. The main factors beyond a developer's control that will stop gamers playing are a lack of time and family commitments. Gamers would not stop playing because of poor exam grades or from fear of addiction. The most significant difference between these two types of gamers is that casual gamers are more likely to stop playing than hardcore gamers because of lack of time ($F_{1,299}=13.84, p<0.01$) and because of problems with their partner ($F_{1,299}=7.78, p<0.01$).

Table 7 – Factors that make gamers renew their subscriptions

	Mean	N	SD
Wide variety of things to do	4.57	301	0.68
Game performance	4.48	301	0.72
Evolving game world	4.46	301	0.71
Exploration of game world	4.37	301	0.78
Replayability value	4.37	301	0.83
Strong game community	4.35	301	0.80
Technical problems	4.29	301	0.84
Engaging story-line	4.29	301	0.85
Interesting end-game	4.24	301	0.99
Levelling options	4.17	301	0.90
Game balancing	4.16	301	0.90
Attachment to avatar	3.97	301	0.97
Staying in touch with friends	3.94	301	1.03
GM Support	3.85	301	0.99
Learning in-game lore	3.82	301	1.06
Learning curve	3.82	301	0.89
Population	3.80	301	1.05
In-game events	3.72	301	1.07
Meeting new people	3.53	301	1.10
Gaining new achievements	3.48	301	1.20
Competing with other players	3.34	301	1.32
Rankings (PVP rankings, etc.)	3.05	301	1.34

a. min = 1; max = 5

Table 8 – Significant differences influencing the renewal of a subscription between male and female gamers

	Male			Female			F _{1,299}	Sig.
	N	Mean ^a	SD	N	Mean ^a	SD		
Game balancing	234	4.25	0.87	67	3.84	0.91	11.57	0.001
Population	234	3.86	1.04	67	3.57	1.03	4.21	0.041
Competing with others	234	3.47	1.28	67	2.90	1.36	10.19	0.002

a. min = 1; max = 5

Table 9 – Factors that make gamers stop playing a game

	N	Mean	SD
Becoming boring	301	4.45	0.80
No new content	301	4.31	0.90
Bugs	301	4.21	0.93
Increasing charges	301	4.15	1.04
Game performance	301	4.10	0.92
Lack of challenge	301	4.07	0.97
Lack of time	301	3.90	1.06
Community becoming annoying	301	3.85	1.14
Trying a new game	301	3.80	1.01
Change in game mechanics	301	3.54	1.05
Family commitments	301	3.49	1.30
Causing problems with my partner	301	3.41	1.34
Friends stopped playing	301	3.39	1.22
Ruining real life relationships	301	3.32	1.45
Declining population	301	3.31	1.17
Friends changing MMORPG	301	3.29	1.21
Harassment from other players	301	3.27	1.37
Poor exam grades	301	2.81	1.45
Fear of addiction	301	2.46	1.35

a. min = 1; max = 5

There are also no significant differences between males and females and their reasons to stop playing, apart from one single factor. Females reported a significantly higher mean ($F_{1,299}=16.60$, $p<0.01$) than males that harassment would stop them from playing.

Main Findings and Implications

Typically, gamers are likely to be single and have no children. They are also likely to be young adults with higher levels of education. This is also confirmed by Yee³² and Griffiths *et al.* Thus, any promotions carried out by publishers should be pitched towards such an audience.

Rice claimed that playing MMORPGs requires a lot of time, averaging between 20 to 30 hours a week, and gamers can keep playing the same game for years.³³ This study yielded similar results. Given the time investment required in MMORPGs, it is clear that people with long working hours or who are otherwise occupied will not be able to enjoy these games properly, making time a very important factor determining whether a person can play or not.

The major sources of information used by gamers are gameplay videos, friends, reviews, and trial periods. It is recommended that developers/publishers make gameplay videos available through third-party review websites or YouTube channels. It is not surprising that gamers prefer gameplay videos as their primary source of information since from such videos they can easily understand the gameplay of a MMORPG and view its graphics which are two of the most important factors influencing their choice of a game. Schiffman *et al.* argue that consumers may try products before buying them. Thus, it may also be a good idea to ask existing players to invite some of their friends to MMORPGs by offering them trial periods, especially when bearing in mind that 40% of the respondents were introduced to MMORPGs by friends and that almost 80% of the respondents typically join servers in which real-life friends are playing.

From this study it appears that the retail price of a game (not a collector's edition) should be approximately €40 and the monthly

32 Yee, 'The demographics'.

33 Kelly.

subscription fee should not exceed approximately €13. The latter figure is similar to that suggested by Timmins.³⁴ Gamers are not really influenced by the retail price of the game and tend to look at the overall costs per month. This is because they consider the value they are getting from the game so, for example, a gamer who is able to play for thirty hours a month may find it reasonable to pay a higher subscription fee than another who can only play five hours a month. This suggests that a pay per use pricing model may be a good deal for people who like such games but do not have a lot of time to spare and perhaps should be investigated in a future study.

Gamers, particularly females, also prefer to pay for multiple months as this will give them better value for money, showing that discounts can influence buyers,³⁵ even in this industry, particularly when it comes to renewing. Given that gamers have nothing against the practice of buying in-game cosmetic items; it may be a good idea to offer gamers subscribing for a number of months a time a little gift, like a special cosmetic item.

Digital downloads are popular because they are more convenient to buy than the other versions. On the other hand, some gamers prefer having something tangible in their hands since it is more practical. Digital downloads are more cost-effective than retail packages, since they have much lower production costs owing to lack of packaging. To increase sales of digital download versions, it may be a good idea to make some cosmetic or social items available with such versions. Such gifts should never be items that can empower an avatar. In an open-ended question, one respondent said that he buys a digital version because it is environmentally sound. While it is only one respondent, it may be interesting to see views of other gamers regarding this issue in a future study.

Collector's editions must have reasonable items tied to the game's story and lore. Having a few in-game items and a more attractive box is simply not enough. The extras offered must be truly collector's items; otherwise it would be meaningless for players to buy such editions.

Gamers, on the whole, have slightly negative attitudes towards F2P games, but ultimately they would play them if they are good.

34 D. Timmins (2005), '*MMORPG Online Gaming Prices*', [Online] Available from: <http://www.theaveragegamer.com/2005/10/31/onlinegamingprices/> (Accessed on 1 September, 2011).

35 Brassington and Pettitt.

Developers of such games still need to earn money and typically do so via micro-transactions.³⁶ It is clear that these micro-transactions should never include the possibility to purchase powerful equipment since people dislike this practice. Income should come from selling cosmetic equipment, extra character slots, and other things that do not unbalance gameplay as well as perhaps other merchandise like T-shirts. If a F2P game is good enough and meets the requirements of players, the players would have an increased chance of supporting the game via micro-transactions.

Irrespective of the pricing model of the game, the most important features of a game for a gamer are gameplay, graphics, story, and lore. Rice is correct in saying that most gamers want good stories; however, it is clear that graphics are just as important and should never be neglected because, after all, nowadays gamers expect a certain level of graphics.³⁷ This makes it imperative for a developer to hire good story-tellers as well as good artists. Good story lines and lore will add depth behind a game. Having good lore will make players fit better in the game and understand their role in it.

Graphics should also be scalable to lower detail levels since some players may not be able to afford the more expensive hardware required to view them.

Players would not renew their subscriptions in the long run unless they have a lot of different things to do in a MMORPG. A developer must add content in the form of new quests regularly as well as evolve the story to add replayability to the game. Introducing other activities, such as hobbies like fishing, which players can engage in the game, is also a good idea because it adds variety to the game. Failure to add new content will make the game repetitive, making it boring— the top reason why gamers would stop playing. Having a strong game community is very important too since, according to Bainbridge,³⁸ socialization is one of the reasons why people play MMORPGs. This makes it a must to have good socializing features in a game.

Technical problems may stop people from renewing. Thus, test servers are also important since they may assist a developer to weed out

36 Rice.

37 Ibid.

38 Bainbridge.

bugs while ensuring that game play is balanced and good fun for gamers. Good customer support who listens to what gamers are complaining about is also a must since ultimately they are paying customers and expect a good product.

Female players have a larger tendency to stop playing because of harassment and developers should ensure that there is enough policing of rules regarding harassment and the necessary action taken when such cases are reported. It would be interesting to find out in a future study whether this harassment is gender discrimination emanating from a male-dominated type of entertainment in which males may think that female are inferior players or else sexual harassment.

This study also revealed that playing MMORPGs is part of gamers' lifestyle and most would not stop playing, although they would never let it take over other aspects of their life. A future psychographic research mapping different types of gamers would give further insights into player likes and dislikes and may perhaps find certain niche markets that are presently untapped.

Another comment in an open-ended question was from a respondent who used to play a MMORPG called Everquest. This respondent had befriended a disabled and wheel-chair bound girl. She could not really play properly, because her movement was restricted and she could never leave the game's starting area. However, she used to just stay there and craft things, such as armour and weapons for other players. In this manner she felt empowered as she felt she was helping people enjoy themselves more. A future study exploring this aspect of MMORPGs may be interesting.

It would be interesting to conduct this study in Asian markets where gaming is very popular. Also, in line with recent studies on gambling such as that by Fang and Mowen,³⁹ further research on gaming could investigate the personality traits of online MMORPG gamers. This would provide more information to the gaming literature than is currently available.

39 X. Fang & J.C. Mowen, 'Examining the trait and functional motive antecedents of four gambling activities: slot machines, skilled card games, sports betting and promotional games', *Journal of Consumer Marketing*, Vol. 26 No. 2 (2009), 121–31.

Limitations

The major limitation of this study relates to the sample used. Since non-probability sampling was used the author is not in a position to confirm that the sample is representative of the population of gamers. Respondent self-selection bias is also a problem.⁴⁰ Moreover, while the link to the questionnaire was posted in several places, not all the possible sources could be reached. This is because some forums require an active subscription to their associated game to post a message in them and this would not have been financially feasible to the author. Moreover, there are hundreds of MMORPGs available and it would be a large challenge in itself to post the questionnaire in each of them.

There is also a limitation owing to the language used since only English-speaking users of social media networks could fill the questionnaire. Of the sample 64.1% is comprised of mainly American, British, and Maltese people which means that the views of Asian and Central European gamers are not represented.

Because of these limitations, the results, while providing a good overview of the factors influencing the buying behaviour of gamers and their choice of MMORPGs, should be viewed as exploratory in nature and readers should take the results in the context of the limitations presented.

40 N.K. Malhotra and D. Birks, *Marketing Research: An applied approach*, 3rd edition (London, 2006); Bryman and Bell.